Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims:

1. (Currently Amended) An optical element holding device for a first optical element, comprising:

an outer member;

an inner member monolithically formed with the outer member and ~~communicated with an outer edge portion of the first optical element to hold~~ holding the first optical element;

a drive element provided with the outer member; ~~and~~

a drive mechanism which is ~~disposed between~~ connected to the outer member and the inner member and changes at least one of an amount of displacement of the drive element and a displacement direction of the drive element; and

a measuring device arranged to measure the movement of the first optical element.

2. (Previously presented) The optical element holding device according to claim 1, wherein the outer member holds a second optical element.

3. (Cancelled)

4. (Currently amended) The optical element holding device according to claim [[3]] 1, further comprising:

a second holding member provided in the outer member to hold a second optical element; and

a heat insulation element located between the measuring device and at least one of the first and the second optical elements.

5. (Currently amended) The optical element holding device according to claim [[3]] 1, wherein the measuring device measures an amount of displacement of the inner member with respect to the outer member, and wherein the movement of the first optical element is determined based on the measured displacement.

6. (Currently amended) The optical element holding device according to claim 5, wherein the measuring device includes an optical encoder having a ~~measured~~ measurement portion fixed to the inner member and a measuring head fixed to the outer member.

7. (Currently amended) The optical element holding device according to claim [[3]] 1, wherein the outer member is annular having an upper portion, a lower portion and a side portion, and wherein the drive mechanism, is one of at least three equally spaced drive mechanisms formed in the side portion of the outer member.

8. (Previously presented) The optical element holding device according to claim 7, wherein the measuring device is one of at least three equally spaced measuring devices arranged along the side portion of the outer member, and each of the measuring devices is located midway between two of the drive mechanisms that are adjacent.

9. (Previously presented) The optical element holding device according to claim 1, wherein the outer member is annular having an upper portion, a lower portion and a side portion, wherein the drive element is an actuator that displaces in a predetermined direction, wherein the actuator is arranged in the connecting

member such that the displacement of the actuator is tangential to the connection member.

10. (Previously presented) The optical element holding device according to claim 9, further comprising a rotating pivot mechanism connected to the actuator and the outer member.

11. (Previously presented) The optical element holding device according to claim 10, wherein the rotating pivot mechanism includes a cutaway spring formed in the outer member and defined by cuttings intersect the optical axis of the first optical element.

12. (Previously presented) The optical element holding device according to claim 9, wherein the outer member includes a cutaway portion having an opening in which the actuator is accommodated.

13. (Original) The optical element holding device according to claim 12, wherein the actuator includes a piezo-electric element.

14. (Previously presented) The optical element holding device according to claim 1, wherein the drive element is an actuator that displaces in a predetermined direction; wherein the drive mechanism comprises:

a first link mechanism connected to the actuator, the outer member and the inner member, to transfer the displacement of the actuator to the inner member; and

a second link mechanism, connected to the outer member and the inner member, to guide relative movement of the inner member with respect to the outer member in a predetermined direction.

15. (Original) The optical element holding device according to claim 14, wherein the displacement direction of the actuator differs from the movement direction of the first optical element, and the first link mechanism converts the displacement direction of the actuator to the movement direction of the first optical element.

16. (Original) The optical element holding device according to claim 14, wherein the first link mechanism includes a displacement increasing mechanism connected to the actuator to amplify the displacement of the actuator.

17. (Previously presented) The optical element holding device according to claim 16, wherein the displacement increasing mechanism includes a cutaway spring formed in the outer member and defined by cuttings intersect the optical axis of the first optical element.

18. (Original) The optical element holding device according to claim 16, wherein the cutaway spring includes an elastic hinge link mechanism defined by a plurality of through holes extending to cross the optical axis of the first optical element, and a plurality of slits formed to be continued to the through holes.

19. (Previously presented) The optical element holding device according to claim 14, wherein when the displacement of the actuator is transferred to the inner member by the first link mechanism, the second link mechanism guides the inner member in a predetermined direction in cooperation with the first link mechanism.

20. (Original) The optical element holding device according to claim 19, wherein the second link mechanism includes a parallel link mechanism defined by a plurality of through holes extending to cross the optical axis of the first optical element and a plurality of slits formed to be continued to the through holes, and

wherein the parallel link mechanism is located along the tangential line of the first optical element.

21. (Previously presented) The optical element holding device according to claim 19, wherein the outer member has at least one of the upper end mounting surface and the lower end mounting surface, the at least one of the mounting surface extends to cross the optical axis, and wherein when a plurality of optical element holding devices are stacked along the optical axis, the mounting surface is opposed to an mounting surface of the adjacent optical element holding device.

22. (Previously presented) The optical element holding device according to claim 19, wherein the second link mechanism guides the inner member such that the position of the optical element matches an optical pivotal position of the optical element.

23. (Previously presented) The optical element holding device according to claim 1, further comprising a return mechanism connected to the inner member to return the inner member to its original position.

24. (Previously presented) The optical element holding device according to claim 1, wherein the inner member has an inner ring to which the outer edge portion of the first optical element is fixed, and the outer member has an outer ring having a mounting portion to which an outer ring of another optical element holding device is mounted, wherein the drive element is an actuator provided on the outer ring to connect the inner ring and the outer ring .

25. (Previously presented) The optical element holding device according to claim 24, wherein the outer ring has a cylindrical wall having an opening, wherein the actuator is located in the opening.

26. (Previously presented) The optical element holding device according to claim 24, wherein the drive mechanism includes a first link mechanism and a second link mechanism, and wherein the first link mechanism and the second link mechanism are formed in the cylindrical wall of the outer ring , and wherein the first link mechanism is connected to the inner ring and transfers displacement of the actuator to the inner ring , and the second link mechanism is connected to the inner ring and guides the inner ring to a predetermined direction in cooperation with the first link mechanism when displacement of the actuator is transferred to the inner ring .

27. (Previously presented) The optical element holding device according to claim 24, wherein the outer ring has two ends, and wherein the mounting portion is provided in at least one of the ends of the outer ring.

28. (Currently amended) The optical element holding device according to claim 24, ~~further comprising:~~

~~a measuring device disposed between the inner ring and the outer ring to measure the relative movement of the inner ring with respect to the outer ring,~~

wherein the outer ring has ~~an~~ a peripheral wall having an opening, wherein the measuring device includes a ~~measured~~ measurement portion provided on the inner ring and a measuring head located in the opening to measure a displacement of the ~~measured~~ measurement portion, wherein a measured displacement of the ~~measured~~ measurement portion is readable by the measuring head through the opening.

29. (Currently amended) A barrel structure accommodating a plurality of optical elements, comprising:

an optical element holding device which holds at least one of the optical elements, wherein the optical element holding device includes:

an outer member;

an inner member monolithically formed with the outer member and ~~communicated with an outer edge portion of one of the optical elements to hold~~ holding the optical element;

a drive element provided with the outer member; ~~and~~

a drive mechanism which is ~~disposed between~~ connected to the outer member and the inner member and changes at least one of an amount of displacement of the drive element and a displacement direction of the drive element; and

a measuring device arranged to measure the movement of said at least one of the optical elements.

30. (Currently amended) An exposure apparatus for transferring a pattern image formed on a mask onto a substrate using exposure light beam, comprising:

a projecting optical system having at least one barrel module, wherein the barrel module includes:

an optical element;

an outer member;

an inner member communicated with an outer edge portion of the optical element to hold the optical element;

a drive element provided with the outer member; and

a drive mechanism which is ~~disposed between~~ connected to the outer member and the inner member and changes at least one of an amount of displacement of the drive element and a displacement direction of the drive element.

31. (Currently amended) A method for making a semiconductor device using an exposure apparatus that transfers a circuit pattern image formed on a mask through a projection optical system onto a substrate using exposure light beam, the method comprising:

applying a photo sensitive agent on a workpiece;

exposing the circuit pattern image to the workpiece using the exposure apparatus, wherein the exposure apparatus includes at least one barrel modules, wherein each of the barrel modules includes:

an optical element;

an outer member;

an inner member communicated with an outer edge portion of the optical element to hold the optical element;

a drive element provided with the outer member; and

a drive mechanism which is ~~disposed between~~ connected to the outer member and the inner member and changes at least one of an amount of displacement of the drive element and a displacement direction of the drive element;

wherein the exposing step includes adjusting [[a]] an image formation property of the projection optical system by moving the optical element;

developing the exposed workpiece, wherein the photo sensitive agent forms a resist corresponding to the circuit pattern on the workpiece by the developing;

etching [[a]] an exposed region except for the resist; and

removing the resist from the workpiece.

32. (Original) The method according to claim 31, wherein a vacuum ultra violet exposing light beam is used in the exposing step.

33. (Previously presented) An optical element holding device comprising:

a ring body accommodating an optical element, wherein the ring body includes:

an inner ring communicated with a peripheral edge portion of the optical element to hold the optical element; and

an outer ring monolithically formed with the inner ring;

an actuator provided with the ring body, wherein the actuator displaces

in a predetermined direction; and

a drive mechanism provided in the ring body to move the inner ring,

wherein the drive mechanism includes:

a displacement increasing mechanism formed in the outer ring; and

a guide mechanism formed in the outer ring and connected to the inner ring, wherein the guide mechanism transfers displacement of the actuator to the inner ring and converts the displacement of the actuator in a direction substantially along the optical axis of the optical element.

34. (Previously presented) The optical element holding device according to claim 33, wherein the outer ring has an outer wall and an inner wall, wherein the displacement increasing mechanism includes a plurality of slits and a plurality of through holes, wherein each of the slits and the through holes extends between the outer wall and the inner wall in an imaginary plane including the optical axis.

35. (Previously presented) The optical element holding device according to claim 33, wherein the outer ring has an outer wall and an inside wall, and the guide mechanism includes a parallel link mechanism defined by a plurality of slits and a plurality of through holes, each of the slits and the through holes extending between the outer wall and the inside wall in an imaginary plane including the optical axis.

36. (Cancelled)

37. (Currently amended) The barrel structure according to claim [[36]] 29, wherein the measuring device measures an amount of displacement of the inner member with respect to the outer member, and wherein the movement of the first optical element is determined based on the measured displacement.

38. (Previously presented) The barrel structure according to claim 29, wherein the drive element is an actuator that displaces in a predetermined direction; wherein the drive mechanism comprises:

a first link mechanism connected to the actuator, the outer member and the inner member, to transfer the displacement of the actuator to the inner member; and

a second link mechanism, connected to the outer member and the inner member, to guide relative movement of the inner member with respect to the outer member in a predetermined direction.

39. (Currently amended) The exposure apparatus according to claim 30, further comprising a measuring device ~~disposed between the inner member and the outer member~~ arranged to measure the movement of the optical element.

40. (Previously presented) The exposure apparatus according to claim 39, further comprising:

a second holding member provided in the outer member to hold a second optical element; and

a heat insulation element located between the measuring device and at least one of the first and the second optical elements.

41. (Previously presented) The exposure apparatus according to claim 39, wherein the measuring device measures an amount of displacement of the inner member with respect to the outer member, and wherein the movement of the first optical element is determined based on the measured displacement.

42. (Previously presented) The exposure apparatus according to claim 30, wherein the inner member is monolithically formed with the outer member.

43. (Previously presented) The optical element holding device according to claim 33, further comprising a measuring device disposed between the inner ring and the outer ring to measure the movement of the optical element.

44. (Previously presented) The optical element holding device according to claim 43, wherein the measuring device measures an amount of displacement of the inner ring with respect to the outer ring, and wherein the movement of the optical element is determined based on the measured displacement.